

# ADARSH KUMAR

+91-6299087739 22ec3002@rgipt.ac.in LinkedIn Github EDA playground HDL Bits

## EDUCATION

**Rajiv Gandhi Institute of Petroleum Technology** 2022 – 2026  
(An Institute of National Importance)  
B.Tech - Electronic Engineering - CPI - 8.62 Amethi, Uttar Pradesh

**VJ International school** 2021  
Intermediate PCM Percentage - 80.1 Bhagalpur, Bihar

**DAV Public school** 2019  
Matriculation - Percentage - 91.6 Bhagalpur, Bihar

## COURSEWORK / SKILLS

- Digital Circuit Design
- Signals and Systems
- Embedded System
- Analog Circuit Design
- Hardware Described language (HDL)
- Electronic Design Automation (EDA)

## PROJECTS

**Verilog Implementation of MICROPROCESSOR** | Verilog 2024

- Designed and implemented a RISC processor using Verilog, focusing on optimizing instruction execution and pipeline performance.
- Developed a comprehensive Testbench to validate functionality and enhance design efficiency.

**High-Resolution Time-to-Digital Converter Project** | Xilinx Vivado ,Verilog ,FPGA board 2024

- Designed and implemented a high-resolution time-to-digital converter (TDC) using FPGA technology.
- Developed innovative techniques for precise time measurement and noise filtering, achieving improved accuracy for pulse interval measurements. Utilized Verilog and SystemVerilog for design synthesis and simulation.
- Utilized Verilog and SystemVerilog for design synthesis and simulation.

**Wireless IR Remote Controlled Robot** | Arduino IDE , Arduino board 2023

- Designed and developed a wireless robot using an Arduino microcontroller, IR Remote Controlled Module.
- Programmed in Arduino IDE to enable remote control and navigation, integrating user-friendly controls for enhanced functionality.

## TECHNICAL SKILLS

**Languages:** Python, C, Embedded-C , Matlab .

**Hardware Described Languages:** Verilog , System Verilog, VHDL

**EDA Tools:** Xilinx Vivado,Xilinx IDE, Arduino IDE,eSIM

## ACHEIVEMENTS

- Solved 100+ Problems across HDL Bits and Simulated design using EDA playground
- Ranked among the Top 16 teams in the World Robotic Championship organized by AICRA.
- Qualified JEE ADVANCED 2022

## POSITION OF RESPONSIBILITY

- Coordinator , Tinkering Lab (Science and Technical Council RGIPT).
- Teaching Volunteer , project GYANARPAN